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Description

Intruder detection with a video telephone

The invention relates to a surveillance method with a 5 video telephone system.

27 \ 928 discloses a video telephone apparatus which can be used to carry out a surveillance method of this type. The image recorded by the camera of the video telephone apparatus is checked for changes, with a previously recorded image, movements. If a\change or a movement which exceeds a predetermined amount is detected in the image supplied by the video camera, then an alarm situation This evaluation can be carried out imposed. comparison of successive images or by the comparison of a current image withackslash a stored image or else by computation algorithm which, for example, detects movement in the running coding algorithm. calculated motion vector exceeds a certain threshold value, the alarm is triggered.

The triggering of the alarm causes the connection to be set up to a supervisory or surveillance center to which 25 a preconstructed alarm text or an alarm message can be transmitted. The alarm-triggering image is additionally transmitted. This enables the surveillance center to check whether the alarm was triggered by an intruder, or whether a false alarm is involved, for example 30 caused by a cat.

It is conceivable to use a wireless vide λ telephone system instead of the video telephone apparatus. Such a system operates, for example, according to the DECT standard (or the Japanese PHS standard), in which a socalled video

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mobile part is wirelessly connected to a base station.

When a video telephone terminal or a video telephone system is used for a surveillance method, it is possible for the intruder to destroy the alarmsignaling apparatus before a communications link to the central security station has been set up, or at least to disconnect it from the network.

10 The invention is based on the object of specifying a secure surveillance method.

This object is achieved according to the invention by means of the features specified in patent claim 1.

The invention is based on the idea of immediately transmitting the alarm-triggering image sequence or the alarm-triggering image from the mobile apparatus to the base station. This transmission takes place straight away, with the result that it is practically impossible for an intruder to destroy the mobile apparatus before the image transmission. The base station then has enough time to set up the connection to the central surveillance station and to transmit the transmitted, buffer-stored image there.

The invention is described below using an exemplary embodiment.

30 By way of example, a cordless telephone system according to the DECT standard is assumed to be known. Such systems and similar systems are described for example in Funkschau, Issue 13, Year 97 in the article "Comparison of DECT and PHS". Building on this, the mobile part can be provided with a camera, so that a corresponding video telephone system is present for carrying out wireless video telephony. The base station of the telephone system can be connected to a

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wireless or corded, analog or digital communications network.

In order to set up a communications link to said communications network, a call number is input on the mobile part, for example. Once the connection has been set up, from the base station, it is possible to carry out the voice and/or image communication to a remote subscriber. Data stored in the mobile part can also only be transmitted after the setup of the communications link from the mobile part via the base station to the communications network.

The invention is based on the immediate transmission of the alarm and of the alarm-triggering image from the mobile part to the base station.

Such a video telephone system is used for a surveillance method, for example to combat break-ins.

- It is of secondary importance to the invention whether 20 the alarm is triggered in the video mobile part or in the base station itself. In one case, the mobile part is continuously connected to the base station. In this case, the recorded images are immediately transmitted 25 to the base station, where an image change or movement is detected. In another case, this detection is carried out in the mobile part, and if an alarm is imposed, the alarm-triggering image is immediately transmitted to the base station. In both cases, the image or the image sequence is present in the base 30 station before the central surveillance station is dialed from the base station.
- If the mobile part is destroyed by an intruder, for example, the transmission of the associated image can no longer be prevented.

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In one development of the invention, the camera of the video mobile part has image recording sensors for the infrared range.

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This enables movement detection or the detection of image changes to be effected even when it is dark.

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